

ABSTRACT

A probing system for electrical testing of a semiconductor device uses a probe device including probe tips on a surface of a semiconductor die. The probe tips can be fabricated as metal bumps on contact pads having a pattern that is the same as the pattern of contact pads on the semiconductor device. The semiconductor die can provide the probe device with substantially the same thermal properties as the semiconductor device, so that the same probe can be used for testing over a broad temperature range. Further, the probe device can be fabricated using semiconductor device fabrication techniques, so that probe designs can scale down as device fabrication techniques move to smaller dimensions.